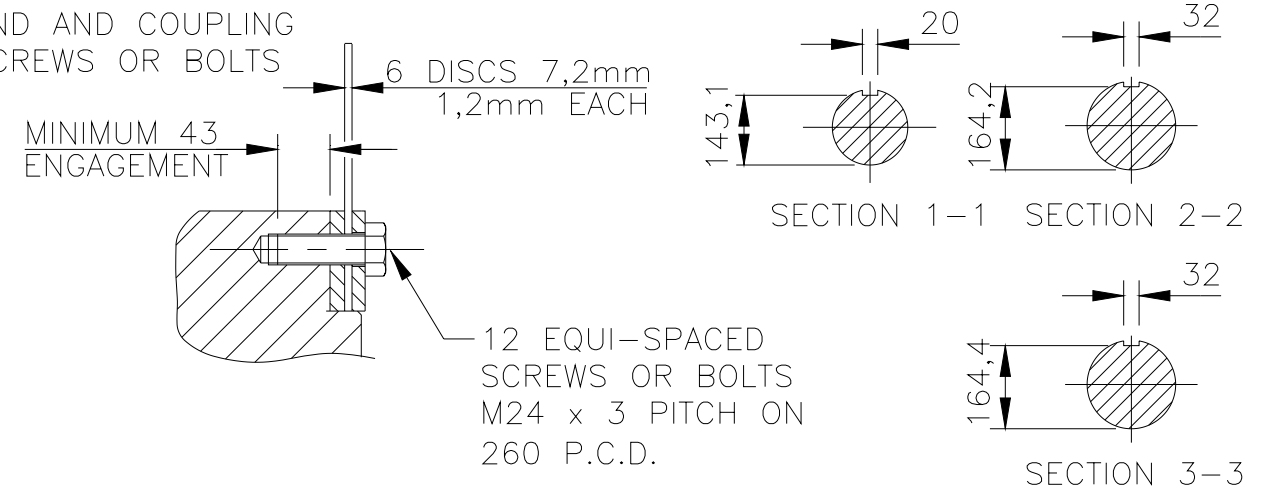


SECTION THRO' SHAFT
END AND COUPLING
SCREWS OR BOLTS



NOTES:
SHAFT STIFFNESS:-
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ
AND THE COUPLING HUB FACE IS $150,99 \times 10^6$ kgcm/radian
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES
WHEN APPROPRIATE).
MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS
 $34,47 \times 10^6$ N/m² FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND
 $68,94 \times 10^6$ N/m² FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES.
FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.
CUMMINS GENERATOR TECHNOLOGIES LTD. SHOULD BE NOTIFIED OF ANY ROTORS
NOT COMPLYING WITH THESE RULES.
CUMMINS GENERATOR TECHNOLOGIES LTD. BALANCE ROTORS TO COMPLY WITH
INTERNATIONAL STD. I.S.O. 1940 GRADE 2,5 AND B.S. 6861 PART 1 GRADE 2,5 .
FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES REFER TO GENERATOR MANUAL.

APPROVED DOCUMENT

COMPONENT	Wt kg	WR ² kgm ²	COUPLING SAE No	COUPLING DIMEN's XX YY	COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 6-PLATES kgcm/rad	COUPLING DISC WR ² kg m ²
EX.ROTOR	46,791	0,7758					
MAIN ROTOR	729,193	28,3983					
FAN	28,800	1,6520					
SHAFT	272,792	1,0198	18	572 16	24,5	1592×10^6	0,590
HUB	53,533	0,8846	21	673 00	23,1	1468×10^6	1,135
P.MAG.ROTOR	6,970	0,0190	24	733 00	26,84	1428×10^6	1,598
STUB SHAFT	0,929	0,0003					
-	-	-					
TOTAL	1139,008	32,7498					

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m ²	lb ft ²	0,04214
kgcm/rad	lbin/rad	1,1521246
N/m ²	lbf/in ²	6894,76

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
5-0448-02	C	TW	30.04.10	CHANGE OF COMPANY NAME AND CORRECTION TO DOUBLE ISSUE.
4/6904/1	B	DW	22.09.03	EX ROTOR MTG ø110, MOD WEIGHT AND INERTIA AND SHAFT, E/ROTOR & TOTAL
4/6745/9	A	SMC	08.07.03	ORIGINAL ISSUE

CERTIFIED PRINT (ONLY IF SIGNED) BY DATE	P7B SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	SCALE	FIRST W.O.
		NTS (SHEET 1:10)	UNIT OF MEASUREMENT MILLIMETRES (mm)
DRAWN SMC 08.07.03 CHECK AJB 30.04.10 APPR'D JKB 30.04.10	CUMMINS GENERATOR TECHNOLOGIES LTD.	DL15-12895 C	ISSUE